In the Claims

Claims are amended as follows:

1. (Currently Amended) A method of transporting voice traffic and audio multi-tone signalling information representing user ~~dialled~~ dialed digits from a connection based circuit-switched network to a packet-switched network, the method comprising notch filtering a plurality of signal samples, determining from said notch filtering the presence or absence of an audio multi-tone signal, in the absence of an audio multi-tone signal, compressing and packetising said voice traffic for transport over the packet-switched connectionless network, and, in the presence of an audio multi-tone signal, decoding that signal to corresponding digit information and transmitting that digit information over the packet-switched network, wherein a power level of said audio multi-tone signal is measured, and wherein said power level measurement is transmitted in association with said digit information over the packet-switched network.

2-3. (Canceled)

4. (Currently Amended) A method of transporting voice traffic and audio tone signalling information representing user ~~dialled~~ dialed digits from a time division multiplex network to a packet-switched network, the method comprising compressing and packetising said voice traffic, sampling said time division multiplex voice traffic with first and second sets of adaptive notch filters so as to provide an indication of presence or absence of pairs of audio tone signals representing call number information in said voice traffic, and, when the presence of a said pair of tone signals is indicated, decoding that pair of tone signals to a corresponding digit value, and transmitting that digit value across the packet-switched network, wherein a power level of a said pair of audio tone signals is measured, wherein said power level measurement is transmitted together with the digit value over the packet-switched network.

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5. (Original) A method as claimed in claim 4, wherein each of said adaptive notch filters is arranged as a single frequency noise canceller with first and second adaptive weights.

6. (Original) A method as claimed in claim 5, wherein a said pair of tone signals is detected by determining the frequency and power level of each signal of the pair, and comparing the frequency and power level with predetermined reference values.

7. (Original) A method as claimed in claim 6, wherein a difference in power levels of the signals of the pair is determined.

8. (Previously Presented) A method as claimed in claim 7, wherein said packet-switched network is an asynchronous transfer mode (ATM) network.

9. (Previously Presented) A method as claimed in claim 8, wherein said time division multiplex network and said packet-switched network are interfaced by an ATM switch.

10. (Currently Amended) A computer-readable ~~Software in machine readable form~~ ~~on a~~ storage medium ~~and arranged~~ tangibly embodying a computer-readable program code executable by a computer to perform the method of ~~claim 4~~ transporting voice traffic and audio tone signalling information representing user dialed digits from a time division multiplex network to a packet-switched network, the method comprising compressing and packetising said voice traffic, sampling said time division multiplex voice traffic with first and second sets of adaptive notch filters so as to provide an indication of presence or absence of pairs of audio tone signals representing call number information in said voice traffic, and, when the presence of a said pair of tone signals is indicated, decoding that pair of tone signals to a corresponding digit value, and transmitting that digit value across the packet-switched network, wherein a power level of a said pair of audio tone signals is measured, wherein said power level measurement is transmitted together with the digit value over the packet-switched network.

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11-13. (Canceled)

14. (Previously Presented) An arrangement for transporting voice traffic and audio tone signalling information from a time division multiplex network to a packet-switched network, the arrangement comprising speech encoding and compression means for compressing and packetising said voice traffic, a plurality of adaptive notch filters for sampling said time division multiplex voice traffic so as to provide an indication of presence or absence of an audio tone signal in said voice traffic, logic means for decoding an audio tone signal to a corresponding digit value when said audio tone signal has been detected, power level measurement means for determining a power level of said audio tone signal, and means for transmitting said power level measurement together with the digit value over the packet-switched network.

15. (Previously Presented) An arrangement as claimed in claim 14, wherein said voice traffic is transported from the packet-switched network to a further time division multiplex network, and wherein said transmitted digit value is re-encoded as a corresponding audio tone signal on egress from the packet-switched network using said power level measurement.

16. (Canceled)

17. (Currently Amended) An arrangement as claimed in claim 14, wherein said logic means is arranged to detect a tone signal pair by comparing the frequency and power level of each signal of the pair with predetermined reference values.

18. (Canceled)

19. (Previously Presented) An arrangement as claimed in claim 14, wherein each of said adaptive notch filters is arranged as a single frequency noise canceller with first and second adaptive weights.

20. (Currently Amended) A communications network arrangement comprising a time division multiplex (TDM) network in which narrow band traffic is transported in

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frames, and a packet-switched network in which said narrow band traffic is transported in a compressed form in cells or packets, wherein, within the TDM network, signalling of user ~~dialled~~ dialed digit information is performed by the transmission of dual tone multi-frequency (DTMF) pairs of signal tones, and wherein a boundary between the TDM and packet-switched networks incorporates signalling tone detection means comprising a plurality of adaptive notch filters for sampling said TDM voice traffic so as to provide an indication of presence or absence of a pair of audio tone signals in said voice traffic, and logic means for decoding a pair of tone signals to a corresponding digit value when said tone signal pair has been detected, power level measurement means for determining a power level of a said pair audio tone signals, and means for transmitting said power level measurement together with the digit value corresponding to the pair of audio tone signals over the packet-switched network.

21. (Previously Presented) An arrangement as claimed in claim 20, wherein said voice traffic is transported from the packet-switched network to a further time division multiplex network, and wherein said transmitted digit value is re-encoded as a corresponding pair of audio tone signals on egress from the packet-switched network using said power level measurement.

22. (Canceled)

23. (Previously Presented) An arrangement as claimed in claim 20, wherein said logic means is arranged to detect a tone signal pair by comparing the frequency and power level of each signal of the pair with predetermined reference values.

24. (Canceled)

25. (Previously Presented) An arrangement as claimed in claim 20, wherein each of said adaptive notch filters is arranged as a single frequency noise canceller with first and second adaptive weights.

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26. (Previously Presented) A method according to claim 1, wherein said voice traffic is transported from the packet-switched network to a further circuit-switched network, and wherein said transmitted digit value is re-encoded as a corresponding pair of audio tone signals on egress from the packet-switched network using said power level measurement.

27. (Previously Presented) A method according to claim 4, wherein said voice traffic is transported from the packet-switched network to a further time division multiplex network, and wherein said transmitted digit value is re-encoded as a corresponding audio multi-tone signal on egress from the packet-switched network using said power level measurement.

28. (Currently Amended) A computer-readable Software in machine readable form on a storage medium and arranged tangibly embodying a computer-readable program and executable by a computer to perform the method of claim 1 transporting voice traffic and audio multi-tone signalling information representing user dialed digits from a circuit-switched network to a packet-switched network, the method comprising notch filtering a plurality of signal samples, determining from said notch filtering the presence or absence of an audio multi-tone signal, in the absence of an audio multi-tone signal, compressing and packetising said voice traffic for transport over the packet-switched network, and, in the presence of an audio multi-tone signal, decoding that signal to corresponding digit information and transmitting that digit information over the packet-switched network, wherein a power level of said audio multi-tone signal is measured, and wherein said power level measurement is transmitted in association with said digit information over the packet-switched network.

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